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ABSTRACT

Each year, from 1982 to 1986, the Library Research Center at the University of Illinois conducted a study called the Index of Quality of Public Library Service. For this study, unobtrusive tests of reference service and book availability were performed annually in Illinois Public Libraries. When the results from rural libraries were compared with those of similar sized non-rural libraries, it was found that rural public libraries performed better on book availability indexes than indexes for reference service; i.e., they performed no differently than non-rural libraries. Rural libraries, like all public libraries, are not providing these services at the 100% level. Library consultants are asked to assist rural public libraries in clarifying rural reference policy, forming rural library reference support groups, and focusing on reference service in continuing education programming. The report is divided into the following sections: research methodology; representativeness of the sample; index values; influences on the index value; the results of the book searches and the reference requests; the study recommendations; and a summary. Concluding the report are the forms used to gather the research data. (8 references/5 tables) (Author/MAB)

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An Index of Quality of Rural Illinois Public Library Service

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FOOTNOTE

The Index of Quality studies were conducted by the Library Research Center at the University of Illinois with funding by the Illinois State Library. This article is based on a paper presented on June 12, 1986 at the "Libraries on the MOVE" conference in Carbondale, Illinois.

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ABSTRACT

Unobtrusive tests of reference service and book availability were performed annually in Illinois Public Libraries. Results from rural libraries are compared with those of similar sized non-rural libraries. Rural public libraries performed better on book availability indexes than indexes for reference service; they performed no differently than non-rural libraries. Rural libraries, like all public libraries, are not providing these services at the 100 percent level. Library consultants are asked to assist rural public libraries in clarifying rural reference policy, forming rural library reference support groups, and focusing on reference service in continuing education programming.

METHODOLOGY

Each year, from 1982 to 1986, the Library Research Center at the University of Illinois conducted a study called the Index of Quality of Public Library Service. Its goal was to measure how well Illinois public libraries satisfied two types of patron demands: requests for specific fiction or nonfiction books and answers to factual reference questions.

Data were gathered unobtrusively. Students from the University of Illinois at Urbana-Champaign returned to their home town libraries during semester breaks and, without alerting the library staff that they were participating in a study, posed as library patrons. Students were recruited through several means. In the first two years of the study, a random sample of 10 percent of the public libraries in the state was drawn and then efforts were made to locate someone from each community in the sample. The sample was stratified to be representative of the population served by libraries across the state. For example, if 50 percent of the population in the state was served by libraries in communities of fewer than 5,000 people, then 50 percent of the sample consisted of libraries service 5,000 or fewer people. Since it was often difficult to locate residents from some of the smallest towns, the method of recruiting data collectors was changed in the third year the study. Instead of drawing a sample of specific libraries, an advertisement was placed in the campus newspaper that invited residents of Illinois communities who had valid library cards for their local public library to assist with the study. As students answered the advertisement, they were screened so that the final sample would include a

the desired proportions of libraries in terms of size as measured by population served. As an incentive to do the work, volunteers were offered $5.00 for each library they visited. During 1986, the final year of the study, students were paid $10.00 per site visited since they were asked to compile additional data for signage within the library, the currency of science encyclopedias, and the results of requesting an item through interlibrary loan.

The students attended orientation and training sessions during which they were supplied with three separate report forms and an instruction sheet. One form was the report for the book search, shown in Appendix A. Each student was assigned a unique fiction or nonfiction book, the titles of which were drawn randomly from five-year-old supplements to H. W. Wilson Company's Fiction Catalog and Public Library Catalog. One of the assumptions of this study was that these sources listed titles that would be purchased by public libraries and, since the titles were at least five years old, it was hoped that the book would not be in popular demand. The report form provided spaces for the students to indicate when they searched for the book and what happened at each step of the search, from looking in the catalog to examining the shelves, and what to do if the book could not be located either in the catalog or on the shelves. Students who found a title listed in the catalog but not on the shelf were trained to ask a library staff member if the title could be reserved or, if reserves were not accepted in the library, to ask if there was some other means by which to obtain the title. Students who did not find the title in the catalog

were to find out if the library could a copy. If interlibrary loan requests were filed the student was to submit their report on the book search after receiving notification from the library that the book was in. Students were not expected to actually check out the books sought.

Students were also provided with two unique reference questions, each printed on a separate reference request report form. One question was to be asked in person and the other question asked over the telephone. The choice to include unique questions for each library site rather than have the data collectors ask the same questions was made in order to not alert public library staff that they were involved in a research study. It was felt that the same questions asked by students simultaneously in different public libraries might arouse suspicion on the part of the library staff and cause the librarians to treat the students' inquiries differently than those of other patrons. The questions, listed in Appendix B, came from several sources: a reference question log from a nearby public library, from the personal experience of the researchers, or from other librarians. In the first two years of the study the principal investigator also reported fabricating some questions that he thought were representative of the types of factual type questions asked in public libraries. Each year's list of questions was reviewed by two practicing librarians who were asked to assess the difficulty level and representativeness of the questions. During the first three years of the study, a majority, if not all, of the questions were assessed to be "easy" to answer. In 1985, the Director of the Library Research Center directed the principal investigator

to include some more difficult questions to determine whether or not score results would differ. In this year, the practicing librarians assessed that 69 percent of the questions were easy to answer. Like the book search form, the reference request form provided spaces for the students to indicate the results received. Appendix C shows a sample form.

Forms were scored on a ten-point scale of accuracy and scoring was conducted by two individuals independently in order to minimize error. A book search received the maximum score of 10 points if the title was both listed in the library's catalog and available on the shelf when the student requested it. A score of zero resulted if the student found the book listed in the catalog but the staff did not reserve the title or offer to get it through interlibrary loan. If the library located a copy of the book within three days of the request then the overall score dropped from 10 to 9. For each week the patron had to wait beyond the first three days, one point was subtracted from the score. If 60 days had passed and the student still had received no notification from the library that the book had been obtained, then the search received a final score of zero.

Reference queries received a maximum score of 10 points if they were answered completely and correctly within 48 hours of the request. A totally incorrect answer received no points. A partially correct answer received five or half of the points possible while answers that were accurate but incomplete were docked two points. Other possible deductions are itemized on the reference scoring outline in Appendix D. The data were analyzed using SPSS/PC.

No attempt was made to rank or otherwise analyze results by individual libraries since the quality of a library's service cannot be evaluated based on its ability to answer two questions and locate one book. Instead, annual results presented an overall picture of service across the state or for groups of libraries by population served. Summaries have been published in the Illinois Library Statistical Report Series (Wallace, 1983; Wallace, 1984; Roy, 1985a; Roy, 1985b; Drone 1987).

While the aim was to include a sample of 10 percent of all public libraries in the state in each year's study, the net sample consisted of 8 to 9 percent of all public libraries in the state in any given year. Over the 5 years, reports were received from 246 libraries, 38 (15 percent) of which were rural libraries. Rural libraries were those that served fewer than 10,000 people and were situated in counties that met at least one of the following criteria: (1) the county had 150 or fewer persons per square mile and/or (2) farms comprised more than 80 percent of the county's acreage.

This report further analyzes these data by examining results from rural libraries. Results can help answer the following questions:

(1) How well are rural libraries providing basic services?

(2) Can we identify reasons for success and failure in providing books and answering reference questions?

(3) How does the performance of rural libraries compare with that of non-rural libraries of similar size?

REPRESENTATIVENESS OF THE SAMPLE

Generalization of the findings may be limited if the sample drawn was atypical of all rural Illinois public libraries. Table I compares the 38 rural libraries in the sample with all 332 rural libraries in the state in 1985 in terms of five variables: size of population served, geographic region, total expenditures, books held, and total loans. The sample was found to be similar to other rural libraries in terms of geographic dispersion: the largest percentage of the libraries were located in northern and central Illinois, followed by southern Illinois. The sample libraries were not similar in terms of the remaining four variables. Rural libraries included in the Index of Quality study best represented those libraries that served communities of from 3,000 to 10,000 and had 10,000 or more volumes. A greater proportion of the sample libraries had $50,000 or more in total expenditures and loans of 50,000 or more. Replication of this study in other rural libraries may well produce different results.

INDEX VALUES

During the five years of the study, surrogates sought a total of 38 unique books, one for each of the 38 rural Illinois visited. While each surrogate was directed to ask two questions, the net sum of reference questions asked as 74 instead of 76. In two cases the student either did not ask both questions or the report was not useable. After the report forms were scored, three index scores were calculated: (1) an Index of Book Availability, (2) an Index of Reference Service, and (3) a Combined Index of Quality. Three separate approaches were used

to arrive at these indexes.

The first method was the index averaging approach. The book availability index was derived by simply summing all 38 book search scores and dividing this sum by 38. Table II shows that an mean score of 6.3 was obtained. The 74 reference requests yielded an average score of 5.8. The Combined Score of 6.1 was found by adding these 2 scores together and dividing by 2.

The Combined Index was also calculated by a formula based on the number of book searches and reference queries. This formula, developed to compensate for the different ways the book searches and the reference queries were scored, is as follows:

Combined Index = (average Index of Book Availability X number of book searches) + (average Index of Reference Service X number of reference questions) / total number of book searches and reference questions

Combined Index = (6.3 X 38) + (5.8 X 74) / 112

Combined Index = 6.0

This approach yields nearly the same Combined Index; the differences in scoring the book searches and the reference did not greatly affect the results.

Weighted scores, by population group, were calculated in order to compensate for the fact that the sample of rural libraries was not truly representative of the state's rural libraries, by population served. The results in Table III show that weighting increased the Index of Book Availability and decreased the Index of Reference Service. The Combined Index was increased only slightly. Table IV and Table V detail the calculations of the weighted scores.

Regardless of the approach used to calculate the index values, the end results are the same: the Index of Book Availability Score was, on the average, greater than the Index of Reference Service. This was also true for 1985 when the reference questions were purposefully made more difficult. Rural libraries were better at providing specific books than at answering reference questions.

Thirteen non-rural libraries also serving population up to 10,000 were included in the study over the five years. T-tests and analysis of variance tests comparing rural and non-rural library book search scores and reference request scores indicate no statistical difference in the scores. This indicates that the rural libraries performed no better or no worse than their non-rural counterparts on these two measures of public library service.

INFLUENCES ON THE INDEX VALUES

The index values could have been influenced by independent variables such as:

1. the sex and age of the surrogates;

2. characteristics of the book searches: the time and day when the book was sought and whether the book was fiction or nonfiction;

3. characteristics of the reference queries: the time and day when the questions were asked, the subject area of the question, and whether the question was asked in-person or over the telephone;

4. characteristics of the library as reported in the Illinois Public Library Annual Reports: population served, total

book holdings, total expenditures and percentage of staff holding a master's degree in library science.

Chi square tests were conducted to determine whether a statistically significant relationship existed between these independent variables and certain dependent variables. For the book searches the dependent variables were: the likelihood that the library owned the book and that the book was available when sought, the length of time it took to get the book if an inter-library loan request or a reserve was filed, and the score of book availability. The dependent variables for the reference queries were the correctness and completeness of the answer, the length of time it took to get an answer, and the score of reference service.

None of these independent variables had any influence on the Index of Reference Service. And only the time of day had any influence on the Index of Book Availability ($p=.02$): most (25 or 86%) of the interlibrary loan requests were filed in the afternoon. If a librarian offered to do further work on a question ($p=.03$) or offered to refer the question ($p=.01$) to some other agency there was a better chance that the student would get a correct and complete answer.

A majority of the students said that they would recommend the library to others (56 or 76%) and that they were satisfied with the answer they received (51 or 69%). In fact, the students recommended 33 or 92% of the libraries that gave correct answers, all 10 of the libraries that gave incomplete answers, and 3 or half of the libraries that gave incorrect answers. One student who received no answer to his question said that he would recom-

mend to others that they use the reference service of his hometown library because "Where else would one go?"

The students rated the librarians higher in friendliness than in competence: 63 or 85% of the librarians received a good rating for friendliness while 46 or 63% of the librarians received a good rating for compentence. The more correct and complete the answer, the higher was the librarians' competence rating (p=.03), indicating that the students were accurate in their estimation of competence. The students were likely to rate the librarian as friendly and competent if it took 10 minutes or less to get an answer (p=.03). Librarians rated friendly (p=.00) or competent (p=.00) had higher reference scores. Students were also more likely to be satisfied (p=.00) or to recommend (p=.00) a library to others if the reference score was high.

THE RESULTS OF THE BOOK SEARCHES AND THE REFERENCE REQUESTS

The scores for the book searches ranged from 0 to 10, depending on how long it took to get the book. The students found that only 4 (11%) of the 38 books sought were listed in the libraries' catalogs. All 4 books were found on the shelves. In one other case, the student was able to receive the book without filing an interlibrary loan request because a librarian brought in her personal copy of a requested book for the student's use.

Interlibrary loan requests were filed for 26 (79%) of the books not held by the libraries. In the cases where an interlibrary loan request should have been filed but was not the reasons varied: 3 students just did not ask for an interlibrary loan even though they were told to ask if there was any way to get the book from another library. In one case the student was

told to try another library; another student was unable to place a request because he needed a nonresident borrower's card. A librarian discouraged one student from filing an interlibrary loan request by stressing the fact that it would take a minimum of 2 weeks to receive the item and it was possible that they would never receive the book. In another case the librarian told the student that she could not fill out an interlibrary loan request if the book was not listed in the interlibrary computer.

The scores for the reference questions also ranged from 0 to 10. To get a score of 10, the question had to have been answered correctly and completely within 48 hours of the request. Also, the source of the answer had to be volunteered by the librarian. An important part of reference service for the librarian to tell the patron where they got the information since this may be the only way the patron can judge whether the information is accurate. The following reference interaction would have received the maximum possible score.

The student reported that she called the public library and asked for the date on which Easter fell in 1939. The librarian answered, within a few minutes with, "I am looking in the 1985 World Almanac where it says that the date for Easter Sunday in 1939 was April 9."

In 11 cases the librarians missed one point because they failed to supply the source of the information. If fact, if in all cases the students were told the source of the answer the entire reference index would have increased from 5.8 to 6.0.

There were several reasons why libraries missed more than one point. Points were deducted if it took longer than 48 hours

to supply an answer. Lower scores resulted if, as in the following cases, the student was directed to the source and had to find the information for herself or himself.

"The librarian suggested the Reader's Encyclopedia and I found the answer immediately."

"She told me to look in the Guinness Book of World Records."

Points were taken off if the answers were incomplete. Incomplete answers may have resulted when the librarian answered the question off the top of his or her head or the librarian did not find a complete answer in one source, such as a partial address, but did not check another source for the zip code. Some answers were partially correct: "I think the museum has no admittance charge and is open all year round."

Twenty-two questions were not answered at all. In 6 cases the student was referred to another person or agency. In 16 cases there not only was no answer provided, there was also no referral; several of these incidents were described by the surrogates as follows.

1. QUESTION: Which state has the highest average life expectancy; which the lowest?

ANSWER: The student reported that the librarian immediately responded: "I don't believe we have any information on that."

2. QUESTION: What is the horse-rider theory of Japanese history and where can I get some information about it?

ANSWER: "The first librarian I asked referred me to the head librarian. She asked me to look in the card catalog, which I did. This led me to a book entitled An Introduction To Japa-

nese History, which did not describe the horse-rider theory. While I was doing that, she was checking the Micropedia and Macropedia of the Encyclopedia Britannica. After not finding anything on the horse-rider theory at first glance, she turned the encyclopedia over to me and said she would be interested to know the answer when I found it. After several minutes of looking for the answer, I discontinued my search."

3. QUESTION: What musicals did Rogers and Hart write?

ANSWER: "The librarian thought an answer could be found, but that it would take too long to find it."

4. QUESTION: Who is the highest paid athlete in the U. S.?

ANSWER: "Sports magazines might have the answer."

If the students in these 16 cases of no answer and no referral had been referred to some other agency that may have provided an answer, the overall index would have increased.

Several factors contributed to an incorrect answer. The wrong source could have been used, the source could have had incorrect data, or the librarian might have used a source incorrectly (e.g., read the wrong table or reported the wrong information on the correct table).

RECOMMENDATIONS FROM THIS STUDY

Based on the results of this unobtrusive test of reference service and book availibility, the following recommendations are made.

RURAL REFERENCE POLICY

Rural public libraries should be guided in their reference services by a reference policy. This should take the form of a written document that includes: 1) a description of the patron

population and the library's goals; 2) reference objectives that itemize how reference services will help the library meet its goals; 3) definitions of the various reference services offered and any limits on services or charges; 4) a discussion of how the collection will support reference service; and 5) a determination of how reference services will be evaluated. The "Draft Outline of Information Service Policy", prepared by the Standards Committee of the American Library Association's Reference and Adult Services Division, describes the structure of such a document (Reference and Adult Services Division, 1979).

Since rural public libraries may be managed by a single librarian without a professional degree and open for only a few hours in a week, a generic reference policy document should be prepared by the regional, system, or state personnel who serve as rural library consultants. Librarians and public library trustees can then use this skeleton document as a point of discussion.

RURAL LIBRARY REFERENCE SUPPORT GROUPS

Rural library consultants should assist rural librarians in forming cooperative reference support groups. Such groups of voluntary members should share close geographic proximity and an interest in improving reference service. Reference support groups can provide the equivalent of structured team coaching in rural libraries with limited personnel. The functions of the groups should be determined by members and may include sharing reference questions and community information files. Members should be encouraged to record not only the frequency of reference queries they receive but also their successes and

failures in meeting these requests. Discussions of the successes and failures can lead to determining why performance is at a particular level and how such performance can be improved.

CONTINUING EDUCATION

The Index of Quality studies conducted annually over 5 years simply reported indexes of state-wide reference service and book availability. Yet it was evident that some libraries scored higher than others; some libraries perhaps would perform better if they received opportunities to learn behaviors that contribute to successful book searches and reference interactions. The following target areas are priorities for such continuing education projects.

To improve book availability scores, continuing education should include a review of interlibrary loan procedures. This is aimed at reducing incidents where patrons are discouraged from filing needed interlibrary loan requests.

Rural library consultants should assist rural librarians in developing or updating skills in using reference sources. The content, structure, and purpose of sources such as telephone directories, almanacs, and Books in Print should be highlighted. Beyond close knowledge of basic sources, rural librarians may need help in developing information search tactics. This may involve outlining the actions the librarians take when they decide whether or not a reference question is acceptable, when they answer reference queries, and whey they do not find an answer to a patron's request for factual information.

There seemed to have been a reluctance on the part of some libraries to refer unanswered reference questions but no evidence

of such a reluctance with book requests. Small public libraries should be experts in providing local information. Referral of information requests to individuals or agencies outside the library provides the patron with an option: there is a chance that the question would be answered.

SUMMARY

Bernard Vavrek observes that we are experiencing a renaissance in rural librarianship (Vavrek, 1985). This is evident in two recent conferences: the "Rural Roots" mini-conference held on April 3, 1986 as part of the Second National Conference of the Public Library Association and the Libraries on the MOVE Conference held from June 10 to June 13, 1986 in Carbondale, Illinois and sponsored by the Illinois State Library and the Shawnee Library System (Hennen, 1986; and Libraries on the Move Proceedings, 1986). Awareness of the importance of rural librarianship is but one step. Attention should now focus on identifying what rural library service is, its status, and suggestions for improvement.

The Index of Quality of Rural Illinois Public Library Service indicates that patrons seeking books or answers to factual reference questions will be served equally as well in rural or non-rural libraries. While the level of service of these two activities are not different, the question remains whether this level is acceptable. And, if this level is not acceptable, should efforts to improve rural reference service differ from those required in non-rural settings. The answers may lie in the formulation of rural reference policy, rural library reference support groups, and continuing education.

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TABLE I

Comparison Between Surveyed Libraries and All Rural Illinois Public Libraries, Based on Data Reported on the Libraries' 1984-1985 Illinois Public Library Annual Reports

	Rural Libraries in Sample		All Rural Libraries in State	
	N	(%)	N	(%)
By Size of Population Served				
Fewer than 1,500	2	(5)	113	(34)
1,500 to 2,999	7	(18)	103	(31)
3,000 to 4,999	12	(32)	63	(19)
5,000 to 9,999	17	(45)	53	(16)
Total	38	(100)	332	(100)
By Geographic Region				
Chicago and suburbs	0	(0)	8	(2)
Northern and central Illinois	20	(53)	178	(54)
Southern Illinois	18	(47)	146	(44)
Total	38	(100)	332	(100)
By Total Expenditures				
Less than $50,000	22	(58)	279	(84)
$50,000 or more	16	(42)	53	(16)
Total	38	(100)	332	(100)

TABLE I (Continued)

	Rural Libraries in Sample		All Rural Libraries in State	
	N	(%)	N	(%)
By Books Held				
Fewer than 10,000 volumes	10	(26)	155	(47)
10,000 to 19,999 volumes	11	(29)	124	(37)
20,000 volumes or more	17	(45)	53	(16)
Total	38	(100)	332	(100)
By Total Loans				
Fewer than 50,000 loans	24	(63)	305	(92)
50,000 or more loans	14	(37)	27	(8)
Total	38	(100)	332	(100)

Source: "Illinois Public Libraries, Statistics, 1984-85," Illinois Libraries 68, 129-153.

TABLE II

Index Averaging Approach to Calculating Index Values

	Rural Libraries in Sample N = 38
Index of Book Availability	6.3
Index of Reference Service	5.8
Combined Index of Quality	6.1

TABLE III

Weighted Population Approach to Calculating Index Values

	Rural Libraries in Sample N = 38
Index of Book Availability	6.9
Index of Reference Service	5.5
Combined Index of Quality	6.2

TABLE IV

Book Availability Score Weighted by Population Group*

Rural Population Group	(1) Number in Sample	(2) Group Index Score	(3) Number in State	(4) Percent in State	(5) Weighted Index Score
Fewer than 1,500	2.0	9.0	113.0	34.0	3.1
1,500 to 2,999	7.0	5.0	103.0	31.0	1.6
3,000 to 4,999	12.0	6.5	63.0	19.0	1.2
5,000 to 9,999	17.0	6.4	53.0	16.0	1.0
TOTAL	38.0	6.3	332.0	100.0	6.9

*The group index score (column 2) is the mean score for all reports from the rural libraries within each population group. The weighted index score (column 5) is calculated by multiplying a group index score (column 2) by the percentage of the population served by the libraries in that population group (column 4). The total weighted index score is the sum of all weighted index scores (column 5).

TABLE V

Reference Service Score Weighted by Population Group*

Rural Population Group	(1) Number in Sample	(2) Group Index Score	(3) Number in State	(4) Percent in State	(5) Weighted Index Score
Fewer than 1,500	4.0	6.0	113	34.0	2.0
1,500 to 2,999	13.0	4.1	103	31.0	1.3
3,000 to 4,999	24.0	5.7	63	19.0	1.1
5,000 to 9,999	33.0	6.6	53	16.0	1.1
Total	74.0	5.8	332	100.0	5.5

*The group index score (column 2) is the mean score for all reports from the rural libraries within each population group. The weighted index score (column 5) is calculated by multiplying a group index score (column 2) by the percentage of the population served by the libraries in that population group (column 4). The total weighted index score is the sum of all weighted index

APPENDIX A

REPORT ON BOOK SEARCH

Author and Title of Book:

Please provide the following information:

1. Day of week and date on which search was made _____;
   approximate time of day of search _____.
2. Is the book in the library catalog? (Try under both author and title.)
   YES _____ NO _____. If NO, go to step 5.
3. If the book is in the catlaog, can you find it on the shelves?
   YES _____ NO _____. If YES, go to step 7.
4. If you cannot locate the book, ask at the circulation desk for help.
   a. If the person you ask for help is able to locate the book, check here _____ and go to step 7.
   b. If the person you ask for help suggests filing a reserve for the book, do so. If no such suggestion is made, ask if it is possible to file a reserve.
   c. If a reserve is filed, record the date the reserve was filed _____, and the date you receive word that the book is being held for you _____, and go to step 7. If a fee is charged for filing the reserve, record here the amount you paid _____, and you will be reimbursed.

5. If you cannot find the book in the catalog, or if the library does not accept reserves, ask if there is any other way you can get the book. Describe on the back of this sheet any suggestions made by the person you ask. If interlibrary loan is not suggested, ask if it is possible to borrow the book from another library. If no interlibrary loan request is made, check here _____ and go to step 7.
6. If an interlibrary loan request is filed for you, record here the date on which you asked for the book _____, and the date on which you receive word that the book is being held for you _____.
7. Provide any comments on your book search on the back of this page.
8. Name of library _____.
9. Your name _____.

(When finished, return this form in person to the Library Research Center.)

APPENDIX B

REFERENCE QUESTIONS ASKED IN RURAL ILLINOIS PUBLIC LIBRARIES, 1982-1986

1. When will the 1982 Boston Marathon be run?
2. Are there any colleges in Steubenville, Ohio?
3. Is Texarkana in Texas or in Arkansas?
4. Why is the abbreviation for the word pound spelled "lb"?
5. Where can I obtain a permit to distill alcohol for fuel?
6. What is the address of the IZOD company?
7. Was Hitler really Time magazine's "Man of the Year"?
8. The giant rabbit in the play "Harvey" was called a pooka. What is a pooka?
9. What was the name of the mythical creature that had nine heads?
10. What are the average life spans of men and women in the United States? How do they compare with the worldwide averages?
11. What is the address of the Chamber of Commerce in Caspar, Wyoming?
12. Can you find me a map that shows the world's major diamond mines?
13. Who is the highest paid athlete in the United States?
14. Which state has the highest average life expectancy; which the lowest?
15. Which country has the highest female life expectancy; which the lowest?
16. In a close finish in a track race, what part of the body determines which runner is the winner?

17. What is the horse-rider theory of Japanese history and where can I find some information about it?
18. How does the elevator work?
19. What do you call a baby rabbit?
20. Is there an association involved with Alzheimer's disease?
21. How did the passion flower get its name?
22. What is Senator Percy's Washington address?
23. Who were the last Americans to walk on the moon?
24. What are the hours of operation and admission prices to the Joseph Smith Historical Center in Nauvoo, Illinois?
25. What is the birthstone for August? What is its color?
26. Where is the coldest spot on earth?
27. Which is greater, a quart or a liter?
28. How many toes does a cat have on its hind feet?
29 How many people belong to the fraternal organization called the Order of the Eastern Star? Who can join the Order?
30. Which state has the lowest unemployment rate among women; which the highest?
31. Who was Mikhail Pogodin?
32. Were there any no-hit games in professional baseball in 1985? If so, when and who played them?
33. What are the words to the Swedish national anthem (in English)?
34. What is the circulation of Cricket, the Magazine for Children (published by Open Court Publishing Co.)?
35. In which country did Lillian Carter work for the Peace Corps?

36. Where can I get a poem I have written published in a journal in Illinois or Indiana that will pay money for the poem?
37. Can you find me a book about the DuPage River Valley near Naperville in Illinois?
38. When was July 4th first celebrated as a national holiday in the U.S.?
39. Who played Wilma Rudolph's mother in the TV movie of her life?
40. Who and when was the last signer of the Declaration of Independence?
41. Who was the first woman to conduct at the Metropolitan Opera?
42. When did Lincoln deliver his Gettysburg Address?
43. What is gnosticism?
44. What musicals did Rogers and Hart write?
45. When is National Bosses' Day?
46. What is the name of the fluid surrounding the brain?
47. When was the Taj Mahal built? How long did it take to build it?
48. Is "psychographics" a legitimate word?
49. Where did horses in North America come from?
50. What does the abbreviation "s.v." mean in a footnote?
51. What day of the week was July 4, 1776?
52. When and where was the longest lasting rainbow?
53. How much is a jigger?
54. When displaying both the American and Canadian flags, is it proper to display the American flag above the Canadian flag?
55. What is the torque specification for a 1980 Toyota Tercel?
56. In what county is Little Indian, Illinois?

57. What is the address of the editor of the Chicago Sun-Times?

58. What is "geographic tongue"?

59. Who is the lead singer for the rock group Iron Maiden?

60. I need the address of the editor of the major paper in Milwaukee.

61. What is a colposcopy?

62. How deep is Lake Superior?

63. How long is a parsec?

64. What two words are synonymous with heady?

65. Who is in charge of the Woodsy Owl Program? How do I contact this person?

66. In the 1984/85 fiscal year, how much state funding was allocated for driver education in Illinois?

67. What is the smallest bird in North America and where is it found?

68. How long does a domestic cat usually live?

69. What are the two largest bays in the world? How large are they?

70. Is there a list of sunrise and sunset times for cities in Illinois?

71. When did gerrymandering first appear? Where can I find a picture of the first instance of gerrymandering?

72. What is the real name of Diana Ross?

73. What happened to the people who attempted to assassinate President Truman in 1950?

74. When was Easter in 1939?

APPENDIX C

REPORT ON REFERENCE QUESTION

The question to be asked is:

Please provide the following information:

1. Day of week and date on which question is asked _____; approximate time of day _____.
2. Was the question asked by phone _____ or in person _____?
3. Did the librarian ask you to clarify the question or request further information before providing an answer?
   YES _____ NO _____. If YES, what did the librarian ask?
4. What answer did you get to your question?
5. Did the librarian volunteer the source of the answer?
   YES _____ NO _____. If YES, record the source here:

   If NO, ask (once) for the source, and record the source here:
6. If the librarian did not answer the reference question, did he or she offer
   a. to work on it further and get back to you? _____
   b. to consult with other staff members? _____
   c. to refer the question to another library or agency? _____

If the librarian offers to do any of these things, accept his or her offer and describe on the back of this form what happened.

7. Approximately how much time elapsed between asking the question and receiving an answer? _____.

8. a. What is your subjective impression of the librarian's
   (1) friendliness? POOR _____ FAIR _____ GOOD _____
   (2) competence? POOR _____ FAIR _____ GOOD _____

   b. If this had been a real information need of yours, would you have been satisfied? YES _____ NO _____

   c. Based on this experience, would you recommend to others that they come to the library with questions such as this one? YES _____ NO _____

9. Name of library _____.

10. Your name _____.

(When finished, return this form in person to the Library Research Center.)

APPENDIX D

INDEX OF QUALITY SCORIING

BOOK AVAILABILITY SCORING

Maximum points possible = 10

Book in catalog and avilable	Subtract	0
Reserve or ILL notification in 1 to 3 days	Subtract	1
Reserve or ILL notification in 4 to 10 days	Subtract	2
Reserve or ILL notification in 11 to 17 days	Subtract	3
Reserve or ILL notification in 18 to 24 days	Subtract	4
Reserve or ILL notification in 25 to 31 days	Subtract	5
Reserve or ILL notification in 32 to 38 days	Subtract	6
Reserve or ILL notification in 39 to 45 days	Subtract	7
Reserve or ILL notification in 46 to 52 days	Subtract	8
Reserve or ILL notification in 53 to 59 days	Subtract	9
Reserve or ILL notification in 60 days or more	Subtract	10
Book in catalog and not available or not in catalog, and no reserve or ILL attempted	Subtract	10

For refusal to attempt ILL or reserve based on lack of valid borrower's card, assume receipt in 4 to 10 days, and subtract 2 points

Minimum points possible = 0

APPENDIX D (Continued)

REFERENCE QUESTION SCORING

Maximum points possible = 10

Correct and complete answer supplied within 48 hours of request	Subtract	0
Incomplete answer	Subtract	2
Partially incorrect answer (outdated)	Subtract	5
Totally incorrect answer	Subtract	10
No answer, but referred	Subtract	6
No answer, no referral	Subtract	8
Source of answer not volunteered	Subtract	1
Source of answer not supplied when requested	Subtract	2
Patron directed to source, answer in source	Subtract	2
Patron found answer independently after being referred to card catalog, vertical file.	Subtract	4
Original answer not understandable to patron, or not acceptable to patron without clarification.	Subtract	2
For each 24 hours beyond the initial 48 hours	Subtract	0.5

Minimum possible score = 0

APPENDIX E

BOOK TITLES SOUGHT IN RURAL ILLINOIS PUBLIC LIBRARIES,

1982-1986

1. Alder, Warren. The Sunset Gang.
2. Arkin, Frieda. More Kitchen Wisdom. Holt, 1982.
3. Avery, Ira. The Miracle of Dommatina.
4. Awards, Honors, & Prizes. 5th ed. Gale Research, 1982.
5. Barbour, Beverly. The Complete Food Preservation Book; How to Can, Freeze, Preserve, Pickle, and Cure Edibles.
6. Bishop, Jim. The Birth of the United States.
7. Blashfield, Jean F. Apartment Greenery; Growing Plants in Unpromising Places. Little, 1975.
8. Brackman, Arnold C. The Search for the Gold of Tutankhamen.
9. Brothers, Joyce. What Every Woman Should Know About Men. Simon & Schuster, 1981.
10. Carpenter, Humphrey. Jesus. Hill & Wang, 1980.
11. Carpentier, Alejo. Reasons of State. Tr. from the Spanish by Frances Partridge. Knopf. 1976.
12. Chase-Riboud, Barbara. Sally Hemings; A Novel.
13. DiPerna, Paula. The Complete Travel Guide to Cuba.
14. Erdmans' Handbook to the World's Religions. Eerdmans, 1982.
15. Finlay, Iain. The Azanian Assignment.
16. Germond, Jack W. Blue Smoke and Mirrors; How Reagan Won and Why Carter Lost the Election of 1980. Viking, 1981.
17. Gould, Stephen Jay. The Mismeasure of Man. Norton, 1981.
18. Halstead, L. B. Dinosaurs. Blandford Press, 1982.
19. Hennessey, James. American Catholics; A History of the Roman Catholic Community in the United States. Oxford, 1981.
20. Horgan, Paul. The Thin Mountain Air.

21. Jastrow, Robert. The Enchanted Loom: Mind in the Universe. Simon & Schuster, 1981.

22. McCoy, Kathleen. Coping with Teenage Depression: A Parent's Guide. New Am. Lib., 1982.

23. McIlvanney, William. Laidlaw.

24. Milam, James R. and Ketcham, Katherine. Under the Influence: a Guide to the Myths and Realitites of Alcoholism. Madrona Pubs., 1981.

25. Miller, Ruth. The Poetry of Emily Dickinson.

26. Neal, Helen. The Politics of Pain.

27. Olgin, Howard A. The Doctor Game.

28. Raines, Howell. Whiskey Man.

29. Read, Piers Paul. Polonaise: A Novel. Lippincott, 1976.

30. Rinzler, Carol Eisen. Your Adolescent: An Owner's Manual. Atheneum Press, 1981.

31. Ross, Frank. Sleeping Dogs.

32. Schaeffer, Susan Fromberg. Time in its Flight.

33. Alnak, Dorothy. The Investigation.

34. Van Herk, Aritha. Judith.

35. Walshok, Mary Lindenstein. Blue-Collar Women: Pioneers on the Male Frontier. Anchor Books, 1981.

36. Weidman, Jerome. A Family Fortune.

37. Williams, Oscar, ed. Master Poems of the English Language.

38. Zollinger, Norman. Riders to Cibola.